

Title (en)
GEAR PUMP

Title (de)
ZAHNRADPUMPE

Title (fr)
POMPE A ENGRENAGES

Publication
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Application
EP 04790614 A 20041019

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Abstract (en)
[origin: WO2005039859A1] The invention relates to a gear pump which is suitable for delivering highly viscous materials. The aim of the invention is to provide a gear pump having a low-wear and low-maintenance bearing system, high output and good self-cleaning properties. For this purpose, the gear pump according to the invention comprises a housing (2), a gear section (7) comprising a sun wheel (14) and a plurality of stationarily mounted planet wheels (16), an input screw section (6) comprising an input screw shaft (12) linked with the sun wheel (14) in a rotationally fixed manner and an input transfermix area (22), and an output screw section (9) comprising an output screw shaft (20) linked with the sun wheel (14) in a rotationally fixed manner and an output transfermix area (25). The screw shafts (12, 20), in the transfermix areas (22, 25), have flight depths that decrease toward the gear section (7). In the housing (2; 2a, 2c), flights (23, 26) are configured which extend in an opposite direction relative to the screw shafts (12, 20), which have increasing diameters towards the gear section (7) and which end each between the planet wheels (16).

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